

BEAR RIVER COMMISSION

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MEMORANDUM 94-31

TO:

All Commission Members and Alternates

The Technical Advisory Committee

FROM:

Jack A. Barnett, Engineer-Manager

SUBJECT:

Conditions in the Bear River

DATE:

September 9, 1994

Chairman

Charles J. Heringer, Jr.

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ENGINEER-MANAGER

Jack A. Barnett Suite 101 106 West 500 South Bountiful, UT 84010

ATTORNEY

E. J. Skeen Attorney At Law 536 East 400 South Salt Lake City, UT 84102 The water supply in the Bear River is very poor at this moment in time and the prospects for next year also do not look good. I felt that it was timely for me to advise Commission Members of the current situation.

Starting at the top of the river, in the Upper Division, you will note from the attached hydrograph that the river has been in a state of emergency as defined by the Compact since late June and that the divertible flow has now leveled out near the bottom of the hydrograph at less than 100 cfs. This week there was only 94 cfs of total divertible flow in the Upper Division. The river is virtually dry flowing into the Woodruff Narrows Reservoir. There was 3 cfs reported this week. The Woodruff Narrows Reservoir is discharging 14 cfs. The storage in the reservoir is low at about 8700 acrefeet. The upper Wyoming section is entitled to 46 cfs and this last week was only able to find water available for diversion in the amount of 44 cfs as evidenced by virtually total diversion of the river as it flows through the Upper Wyoming Section.

In the Central Division, the flows are also very low with only 161 cfs of total divertible flow. Wyoming is only entitled to 69 cfs for this next week and Idaho is entitled to 92 cfs. There is only 15 cfs leaving the Central Division via the Rainbow Inlet Canal to Bear Lake. You will also note from the attached hydrograph the decline of the divertible flow in the Central Division. The divertible flow has been below the 870 cfs water emergency trigger since the first call-in that I received from the river commissioners this year on May 13.

With respect to the Lower Division, you will find the enclosed hydrograph of Bear Lake most informative. Last year at this time, Bear Lake was at 5910.39 and yesterday it was at 5906.97. Bear Lake reached a high this year of 5911.62 on May 13. Over the last three weeks, Utah Power has reduced the pumping rate by about 400 cfs and they are currently delivering out of the outlet canal 573 cfs. There will be a meeting of the water users in the Lower Division in Utah on September 23 and Carly Burton reports to me that he hopes to be able to turn the Bear Lake pumps off within the next two weeks.

The natural flow in the Bear River in the Lower Division, although I do not get a report that allows me to calculate the exact amount, is very low. Utah Power's permit from the State of Idaho to dredge the sandbar above their pumps on Bear Lake expired this spring. They currently do not have authority to dredge the sandbar and it is reported to me that the pool next to the pumps at Lifton declines at the rate of current pumping when there is a wind from the north. The flow across the sandbar towards the pumps is marginally able to sustain the current rate of pumping. From the above numbers you can see that the lake is 3.42 feet lower today than it was a year ago. If we do not have an extraordinary water year this winter, my guess is that there will be a need to restrict the deliveries out of Bear Lake. If one were to look at a pessimistic scenario that the next water year is not going to be any better than this water year, then you would see Bear Lake drawing down to about 5903.50 feet, a level that would have major impacts on the use of Bear Lake and the opportunity of Utah Power to draw water from the lake.

It becomes apparent that Utah Power will not be able to dredge this fall because it will take more than 60 days for them to get a dredging permit in place from the State of Idaho. Pumping from the lake will be significantly curtailed next year unless we have a very good water year and/or dredging occurs in the spring of 1995. It is also apparent that upstream users will be restricted with respect to original Compact storage for a significant period of time. I anticipate that when the Commission meets on November 29 that we will have a detailed discussion concerning the water supply situation along the Bear River.

Commission members may be interested to know that the State of Utah is holding a conference where water issues in the state will be discussed. The meeting will be held on November 15 and as a part of the program I have been asked to chair a panel which will discuss the use of Bear Lake. The people who have been invited to participate are Carly Burton representing Utah Power, Merlyn Olsen representing the views of property owners around Bear Lake, and Brent Rose, the attorney for the Bear River Canal Company.

np enclosures

cc: Other Interested Parties





